

### REMARKS

Claims 1-30 are pending in the present application. Claims 1-30 have been rejected. Claims 1, 5, 7-11, 13, 17-21, 23, and 27-30 have been amended. Claims 4, 6, 14-16, and 24-26 have been cancelled. Favorable reconsideration and further examination are respectfully requested.

#### 35 U.S.C. § 112, ¶ 2 Rejections

Claims 1-30 have been rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite. Applicants respectfully disagree, but have amended the claims to expedite prosecution. Applicants therefore respectfully request that the Examiner withdraw the rejection and allow claims 1-3, 7-13, 17-23, and 27-30.

#### 35 U.S.C. § 101 Rejections

Claims 1, 2, 4-12, 14-22, and 24-30 were rejected under 35 U.S.C. § 101 because they are allegedly directed to non-statutory subject matter. Applicants respectfully disagree, but have amended the claims to expedite prosecution. In particular, Applicants have amended claim 1 to include the feature of "running an animation sequence that includes the modified node graph." Running an animation sequence is clearly a practical application and produces a useful result. Applicants therefore respectfully request that the Examiner withdraw the 35 U.S.C. § 101 rejection and allow claim 1.

Independent claims 9, 11, 19, 21, and 29 each contain a similar feature as described above for claim 1, and are therefore similarly allowable. Applicants therefore respectfully request that the Examiner allow claims 9, 11, 19, 21, and 29.

Dependent claims 2, 5, 7, 8, 10, 12, 17, 18, 20, 22, 27, 28, and 30 are all variously dependent on the independent claims and are therefore allowable for at least the reasons given above for the independent claims. Applicants therefore respectfully request that the Examiner withdraw the rejection and allow claims 2, 5, 7, 9, 10, 12, 17, 18, 20, 22, 27, 28, and 30.

35 U.S.C. § 102(b) Rejections

Claims 1-30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Lake et al., “Stylized Rendering Techniques for scalable real-time 3D animation”, 2000 (“Lake”).

Applicants respectfully disagree. Claim 1 as amended contains features that are neither taught nor suggested by Lake. Claim 1 recites:

A method of determining a node path through a node graph, comprising:  
modifying the node graph in accordance with a metric;  
performing a path finding process through the modified node graph to determine the node path.  
running an animation sequence that includes the modified node graph;  
detecting a change in performance of a platform running the animation sequence;  
adjusting the modified node graph in accordance with the change in performance; and  
if a specific node of the modified node graph is removed during adjusting:  
**re-locating the specific node on the modified node graph; and**  
**performing the path finding process using the re-located specific node.**

Applicants respectfully submit that Lake fails to teach or suggest **re-locating the specific node on the modified node graph; and performing the path finding process using the re-located specific node**. This feature was originally found in now cancelled claim 6. In the rejection of that claim, the Examiner stated that the feature was taught by Lake at section 7, line 7.

Applicants respectfully disagree. Lake describes a system for nonphotorealistic rendering (NPR) that includes real-time methods to emulate cartoon styles (Lake, Abstract). More specifically, section 7 recites in its entirety:

Since today's computer hardware is equipped with various types of processors, graphics accelerators, and drivers, we have integrated our NPR techniques with MRM so that they can scale in real time to maintain a constant frame rate while maximizing visual fidelity. We use the term *scalability* to mean the ability to render models with our NPR techniques at interactive frame rates on a range of low- to high-end platforms. In Table 1, we show that we can remove from or add vertices to a 3D mesh to change the level of detail of the mesh at run time and maintain 30fps. Figure 14 shows a comparison of the performance of our stylized rendering

algorithms against that of the Gouraud shading with and without animation on a high-end Pentium III® performance level PC. We are in no way indicating benchmarks of a particular processor, graphics card, or any other device (Link, section 7, lines 1-14).

Applicants respectfully submit that the cited portion of Lake merely describes that a multi-resolution mesh (MRM) system can be applied to maintain a frame rate (Lake, section 7, lines 3-5). However, Applicants respectfully disagree that the cited portion of Lake teaches **re-locating the specific node on the modified node graph and performing the path finding process using the re-located specific node**. The Examiner states that “it should be noted that nodes are relocated according to the level of the platform.” Even if the Examiner’s statement is true (which Applicants do not concede), the Examiner has still failed to point to any teaching in Lake of **re-locating the specific node on the modified node graph and performing the path finding process using the re-located specific node**. There is no mention of re-locating a specific node or performing the path finding process using the re-located specific node anywhere in Lake. Applicants therefore respectfully request that the Examiner withdraw the rejection and allow claim 1.

Independent claims 11 and 21 contain similar, but not identical features as independent claim 1, and are therefore allowable for at least the reasons given above for claim 1. Applicants therefore respectfully request that the Examiner withdraw the rejections and allow claims 11 and 21.

Independent claim 9 as amended contains features that are neither taught nor suggested by Lake. Specifically, Lake fails to teach or suggest **re-performing the path finding process through the adjusted modified node graph to obtain the node path**. The Examiner stated that this feature was taught by Lake at table 1, and further stated that:

It should be noted that “a path finding process” is being interpreted as a process for finding a new interconnection of nodes, basically generating a new node graph with a different level of detail. Lake does this using the nonphotorealistic rendering (NPR) technique with the multiresolution mesh (MRM) system (Office Action page 6).

Applicants respectfully disagree. The feature of “re-performing the path finding process through the adjusted node graph to obtain the path” should not be interpreted as “generating a new node graph with a different level of detail.” Re-performing the path finding process does not adjust the level of detail in the graph or modify the graph. Moreover, re-performing the path finding process is performed in response to adjusting the modified node graph to compensate for a change in the platform performance. Applicants respectfully request that the Examiner withdraw the rejection and allow claim 9.

Independent claims 19 and 29 contain features that are similar, but not identical to those described above for independent claim 9 and are therefore allowable for at least the reasons given above for claims 19 and 29. Applicants respectfully request that the Examiner withdraw the rejections and allow claims 19 and 29.

Claims 2, 3, 5, 7, 8, 10, 12, 13, 17, 18, 20, 22, 23, 27, 28 and 30 are all variously dependent on independent claims 1, 9, 11, 19, 21, and 29, and are therefore allowable for at least the reasons given for claims 1, 9, 11, 19, 21, and 29. Applicants therefore respectfully request that the Examiner withdraw the rejections and allow claims 2, 3, 5, 7, 8, 10, 12, 13, 17, 18, 20, 22, 23, 27, 28 and 30.

Claims 1 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by “Advogato’s Trust Metric”, [www.advogato.org](http://www.advogato.org), 2000 (“Advogato”). Applicants respectfully disagree. Advogato describes a trust metric that “evaluates a set of peer certificates, resulting in a set of accounts accepted. These certificates are represented as a graph, with each account as a node, and each certificate as a directed edge. The goal of the trust metric is to accept as many valid accounts as possible, while also reducing the impact of attackers” (Advogato, page 1). Advogato fails to teach **re-locating the specific node on the modified node graph, and performing the path finding process using the re-located specific node** as found in claims 1 and 11. Applicants therefore respectfully request that the Examiner withdraw the rejection and allow claims 1 and 11.

Claims 1, 2, 3, 11, 12, 13, 21, 22, and 23 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bandi et al., “Path finding for human motion in virtual environments,” 2000

("Bandi"). Bandi teaches a "technique for generating global motion paths for a human model in virtual environments" (Bandi, Abstract). In particular, Bandi describes a solution for creating a cell path between two cells in a graph that is closest to a Euclidian straight line known as "Digital Differential Analyzer" (Bandi, § 5.3). Bandi fails to teach or suggest **re-locating the specific node on the modified node graph, and performing the path finding process using the re-located specific node** as found in claims 1, 11, and 21. As described above, Bandi describes various methods to determine a path between two cells on a graph (including Digital Differential Analyzer), but none of the described methods teaches or suggests **re-locating the specific node on the modified node graph, and performing the path finding process using the re-located specific node**. There is simply no mention of relocating the specific node on the modified node graph anywhere in Bandi. Applicants therefore respectfully request that the Examiner withdraw the rejection and allow claims 1, 11, and 21.

Claims 2, 3, 12, 13, 22, and 23 are all variously dependent on claims 1, 11, and 21 and are therefore allowable for at least the reasons given above for the independent claims. Applicants respectfully request that the Examiner withdraw the rejection and allow claims 2, 3, 12, 13, 22, and 23.

#### 35 U.S.C. § 103(a) Rejections

Claims 4-10, 14-20, and 24-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bandi in view of US Patent No. 6,262,739 ("Migdal"). Migdal teaches "[a] system and method for the rapid creation of an optimized mesh model of a real world object" (Migdal, Abstract). Migdal provides "dynamic 'up resolution/down resolution' mesh construction capabilities. The system inserts points into the mesh incrementally, ordering the points before each insertion so that dynamic resolution construction can be maintained." (Migdal, Abstract). The feature of **re-locating the specific node on the modified node graph, and performing the path finding process using the re-located specific node** is similar to a feature originally found in now cancelled dependent claims 6, 16, and 26. This feature was incorporated into independent claims 1, 11, and 21. In the rejection to claims 6, 16, and 26, the Examiner stated that Bandi taught such a feature at Figure 6. As stated above, Bandi merely

teaches various ways to determine an optimal path between two cells on a graph and does not teach **re-locating the specific node on the modified node graph, and performing the path finding process using the re-located specific node**. Claims 5, 17, 18, 27 and 28 are all variously dependent on independent claims 1, 11, and 21, and are therefore allowable for the same reasons given above with respect to Bandi. Migdal is concerned with altering the resolution of a mesh by removing and adding points, but has no description of performing a path finding process, or re-locating a specific node. Thus, Migdal fails to cure the deficiencies of Bandi. Applicants therefore respectfully request that the Examiner withdraw the rejection and allow claims 5, 17, 18, 27 and 28.

Independent claims 9, 19, and 29 contains features that are neither taught nor suggested by the combination of Bandi and Migdal. Specifically, Bandi and Migdal fail to teach or suggest **re-performing the path finding process through the adjusted modified node graph to obtain the node path**, as taught by claims 9, 19, and 29. The Examiner states this feature is taught by Bandi at Figure 6. Applicants respectfully disagree. As discussed above, the cited portion of Bandi describes various ways to determine an optimal path between two cells on a graph, but makes no mention of **re-performing the path finding process through the adjusted modified node graph to obtain the node path**. Migdal describes changing the resolution of a graph by adding or removing points, but makes no mention of performing a path finding process or of relocating a specific node. Applicants therefore respectfully request that the Examiner withdraw the rejection and allow claims 9, 19, and 29.

Claims 10, 20, and 30 are all variously dependant on claims 9, 19, and 29, and are therefore allowable for at least the reasons described above for the independent claims. Applicants respectfully request that the Examiner withdraw the rejections and allow claims 10, 20, and 30.

#### Conclusion

Applicants submit that the claims are in condition for allowance, and requests that the Examiner issue a notice of allowance. It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not

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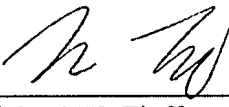
Attorney's Docket No.: 10559-633001 / P12144

signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

No fee is believed due. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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